TURNTABLE UNIT FOR ARTICLES OF FURNITURE

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This invention relates to a device in the nature of a turntable unit adapted to rotatably support articles of furniture and has for its primary object the provision of a wheel-like member having rollers on the spokes thereof engageable with a pair of superimposed plates, the uppermost of which receives the article of furniture whereby to render the latter freely movable on a vertical axis.

It is now common knowledge that television receiver sets should be adjusted with respect to the spectator in order to present a most favorable view of the screen. In the absence of means for rotatably supporting the set it is usually somewhat difficult to move the same to the position desired and further, the support for the set is usually marred during the adjusting operations.

It is accordingly the most important object of the present invention to provide a turntable unit that includes a hub provided with a vertical spindle or shaft adapted to rotatably receive a plate for the television set or other article of furniture at its uppermost end and to be similarly anchored to a second below the hub, there being a plurality of radiating arms on the hub, each provided with a roller interposed between the plates.

A further object of the present invention is to provide a turntable unit that includes a relatively flat, polygonal hub having a spindle or shaft and a number of radial arms, each provided with a roller, the diameter of the roller being greater than the thickness of the hub but less than the distance between the ends of the shaft, all to present a freely rotatable supporting means for the article of furniture with which it is used.

Additional objects will be made clear as the following specification progresses, reference being had to the accompanying drawings, wherein:

Figure 1 is a side elevational view of a turntable unit for articles of furniture showing the same operably supporting a television set.

Fig. 2 is a top plan view partially in section taken on irregular line II—II of Fig. 1; and

Fig. 3 is an enlarged, vertical, cross-sectional view taken on line III—III of Fig. 1.

The turntable unit per se forming the subject matter of the present invention includes a relatively small, preferably polygonal hub 10 having a vertical shaft 12, and a number of radial arms 16, all of which may be removably secured thereto if desired as shown in Fig. 3. The hub 10 is provided with tapped openings 18 for receiving external threads 22 on the innermost ends of the arms 16, together with a vertical bore 20, that is adapted to rigidly receive shaft 12.

Each arm 16 respectively is provided with a roller 26 on the outermost free end thereof and rotatably circumscribing a reduced portion 29 of the arms 16. Rollers 26 are therefore, adapted to rotate on a substantially horizontal axis but are incapable of moving inwardly toward the hub 10. Any suitable means may be provided for holding the rollers 26 in place such as a washer 30 and upset or riveted ends 32 on arms 15. It is seen that the diameters of the rollers 26 are more than the thickness of hub 10 or the distance between the upper and lowermost faces thereof. However, the distance between the uppermost end of shaft 12 and the lowermost end thereof is greater than the diameter of the rollers 26.

This wheel-like member is housed between a pair of superimposed plates 14 and 24, each centrally perforated to rotatably receive shaft 12, held in place by screws 31 having the heads thereof disposed in cavities 33 in plates 14 and 24 respectively.

The unit just described is adapted for supporting an article of furniture such as a television set broadly designated by the numeral 34 and illustrated in Fig. 1 of the drawing, the article of furniture 34 overlying the turntable unit and the latter being in turn supported in any suitable manner such as upon the uppermost surface of a table 35.

It is preferable that the shaft 12 be coaxially aligned for free rotation with respect to plates 14 and 24 on a vertical axis perpendicular to the longitudinal axes of the radiating arms 16. By virtue of the dimensions of the rollers 26, the lowermost face of the plate 24 will rest upon such rollers 26 and the latter will in turn rest upon the plate 14 during use of the turntable unit.

It is seen that the operator may merely grasp the article of furniture 34 and rotate the same to any desired position with respect to the table top 35 and that since the lower surface of the plate 24 does not contact the hub 10 and the latter is out of contact with the plate 14, the free movement of the turntable unit is in no way impeded.

Only the essential elements of the unit forming the subject matter of the present invention have been shown and such refinements as may be desired can be included within the spirit of the invention without departing from the scope of the appended claims.

In this connection, it is seen that the entire rotatable unit can be hidden from view by merely providing a skirt 38 on the plate 14, completely hiding the wheel member from view and thereby
presenting an attractive furniture unit. A pad 40 of rubber, felt or the like, glued or otherwise affixed to the lower face of plate 14, protects the top of table 36 and by frictional engagement therewith, aided by the weight of article 34, prevents shifting of the turntable unit relative to the table 36 during rotation of set 34 or at other times.

While plate 24 is shown as polygonal to frictionally receive four rubber feet 42, usually provided on sets 34, and while both plate 14 and skirt 33 are illustrated as circular, such configurations are not critical and may be varied as desired, particularly when the unit is used to rotateably support articles other than that chosen for illustration herein.

Having thus described the invention what is claimed as new and desired to be secured by Letters Patent is:

A turntable unit for television sets and the like comprising a circular, horizontal base plate having a central opening, and a counterbore in the lower face thereof; an annular, upstanding skirt surrounding the plate and secured thereto; a shaft extending upwardly from the plate and rotatably mounted in said opening; a first screw secured to said shaft and having a head disposed in said counterbore; a hub rigid to the shaft above the plate and provided with a plurality of internally threaded bores; a plurality of threaded horizontal arms radiating from the hub, there being an arm in each bore respectively; a roller on the outermost end of each arm respectively and resting on the plate; and a top polygonal plate overlying the skirt, said top plate having a central opening receiving said shaft, and a counterbore in the uppermost face thereof; a second screw secured to the shaft and having a head disposed in the counterbore of the top plate, whereby the said top plate is rotatably mounted on the shaft, said top plate resting on said rollers, the diameter of the rollers being slightly greater than the distance between the upper surface of the base plate and the upper edge of the skirt whereby to hold the top plate out of engagement with the skirt.

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